



Client Name/Logo

Address
Address 2
City, State, Zip
Telephone
Fax
E-mail Address
Website

Lean and Clean Review

Reviewer Name(s)

Address
Address 2
City, State, Zip
Telephone
Fax
E-mail Address

The Client Profile should be a brief summary that provides a snapshot of the facility at the time of the review

Client Profile

Provide a general description of the customer including history of the company, its main products, and the ownership/management of the facility.

Location

Provide a description of the physical location of the facility. Identify any sensitive environmental areas, i.e. wetlands, schools, etc.

Products

Define the customer's general business with specific description of the product line being reviewed.

Production Sales

Describe annual sales, sales trends, and general market information.

Number of Employees

Identify both full time and part time employees.

Customers

List any customer that comprises more than 10% of sales. List sponsor of review regardless of sales percentage.

Facility Size

Provide information on the number and types of buildings and how facility space is used.

Equipment

Identify any significant capital equipment. Include information on under utilized or unused capital equipment.

Inventory

Include both raw stock, work in process, and finished goods.

Review Process Description

Provide a general description of how the review was conducted, who participated, and what outcomes were generally expected.

Current State Observations

Value Stream Maps can be included as either a drawing or a photo.

The Transformation Planner is an optional tool. Include only if it is used as part of the

Transformation Planner Initial Report

Include in this section any relevant output from the transformation planner that applies to the process(s) under consideration.

Value Stream Map

Describe findings in current state value stream map. Attach map to end of report.

Other Observations Identified During Facility Walk-Through

Describe any other important facts that were observed during the current state review.

Analysis of System Conditions

Describe how the analysis was conducted, who participated, and what general causes of waste were identified during this activity. Include as attachments any Pareto charts, affinity diagrams, or other work products generated during this activity.

Improvement Opportunities and Potential ROI

Provide in this section the opportunities for improvement. When possible quantify and provide estimates for savings or return on investment. (The results from the Transformation Planner are a good tool to support/quantify opportunities). Complete those sections that apply.

Improvement Opportunities are separated into Lean and Clean categories.

Lean

Improve Overall Quality and First Pass Yield

List current quality in terms of first pass yield and state what targets the customer wants to achieve. Describe what actions are suggested to achieve this goal, i.e., reduce WIP, institute one piece flow, TPM, standard work, etc.

Increase Inventory Turns

Describe current inventory turns and targets identified during the review. Suggest how the company may achieve these targets. Consider reductions to WIP, opportunities to flow the product, set up pull systems, and reduce setup.

Increase Throughput without Increasing Resources

State how the company can improve throughput without increases in human capital or material resources. Describe any opportunities for workforce training, workplace organization, and flexible manufacturing systems to respond quickly to customer requests.

Improve on-time delivery

Describe strategies that the company can undertake to achieve on-time delivery consistently. Consider how information travels from order entry to product delivery.

Eliminate Injuries and Accidents

Suggest methods to safeguard employee health and safety. These actions may include visual devices and controls, 5S programs, and systematic workforce education.

Reduce Scrap and Rework

List current scrap rate in dollars and targeted future state rework. List strategies like quality at source, WIP reduction etc. to get there.

Clean

Energy

Identify all sources of power to the facility

Energy Efficiency

Describe how the customer can reduce energy demands (improved lighting, better matched motors, eliminated extra processing, steam efficiency, etc.) and become more energy efficient. Include both electricity and other fuels used by the customer.

Renewable Fuel Sources

Identify opportunities to switch to renewable fuel sources (e.g. solar, wind, bio-diesel, etc.).

Water Management

Identify raw water, from outside sources that is used for operations, facility use, and grounds maintenance

Reduction Water Usage

Outline ways for customer to reduce the use of water throughout their processes

Reduction in Wastewater Discharges

List opportunities to reduce the wastewater discharged to receiving streams or to municipal treatment works

Water Pollution

Quantity of waste discharged to water source. Should include any substances regulated in National Pollution Discharge Elimination System (NPDES) permit.

Reduction in Materials in Wastewater Discharge

Outline ways to reduce emissions of heavy metals, chemicals, and nutrients (e.g. mercury, lead, hexavalent chromium, cadmium, methyl ethyl ketone (MEK), ammonia, phosphorus, cleaning solvents, etc.) into wastewater discharges.

Air

Identify the release of any of the following: Clean Air Act Section 112b Hazardous Air Pollutants, Volatile Organic Compounds (carbon based compounds which are photo-chemically reactive), Nitrogen Oxides, Sulfur Dioxides, Carbon Dioxide, PM10

Reduction in Air Emissions

Identify ways to reduce emissions generated during the creation of the product or in the disposal of product wastes (e.g. incineration reductions, in-process recycling, condensing solvents, etc).

Reduction in Impact of Transportation and Distribution

Describe changes in distribution and delivery schedules to reduce the optimize product delivery efficiency. Optimize fuel efficiency of vehicles.

Solid Waste

Identify wastes (liquid or solid) other than Resource Conservation and Recovery Act (RCRA) hazardous wastes, which are shipped off-site for disposal in sanitary landfills

Reduction in Raw Material Inputs

List opportunities the team has identified to improve material efficiency and reduce the amount of raw materials required to make the product

Opportunities to Use Recycled or Reprocessed Materials

Identify opportunities that allow the customer to use recycled, e.g. steel or reprocessed, e.g. crumb rubber to substitute for virgin materials.

Reductions in Packaging

Describe opportunities for the customer to reduce packaging required for shipping product to customers.

Reduction in Solid Waste Outputs

Describe actions the customer could take to reduce the output of solid, nonhazardous waste, e.g. skids.

Hazardous Waste

Identify hazardous and toxic wastes that are regulated under the Resource Conservation and Recovery Act (RCRA), and require specialized handling, storage, treatment, and disposal. All wastes that require manifest control. Measurement should include waste, storage container, and any other associated materials such as rags.

Reduction in Toxic or Hazardous Materials Inputs

List opportunities the team has identified to improve material efficiency and reduce the amount of toxic or hazardous materials required to make the product. Direct and indirect inputs (starting materials, catalysts, cleaning solvents, etc) should be considered.

Reduction in Toxic or Hazardous Materials Outputs

Describe actions the customer should take to reduce output of toxic or hazardous waste.

Toxic/Hazardous Chemicals

Hazardous and toxic chemicals regulated or otherwise of concern

Reduction in Use of Toxic and Hazardous Chemicals

Describe opportunities to reduce the amount of solvents used in manufacturing and cleaning processes

Chemical Substitution

Identify opportunities to substitute more benign, environmentally friendly chemicals for toxic and hazardous ones.

Qualitative Measures

Consider in the review other environmental improvements that cannot be directly or accurately quantified. Examples include: implementing an Environmental Management System (EMS) or Chemical Management System (CMS).

Improved Procedures for Reporting, Record keeping, or Environmental Management System Maintenance

Provide a description of opportunities to reduce labor hours spent conducting regulatory compliance or management of an EMS.

Product Design Improvements to Decrease Environmental Impacts

Suggest opportunities to reduce the impact the customer's product has on the environment.

Reduction in Number of Permits Required

Through reductions in emissions and waste generation, the number of permits that would no longer be necessary. Reductions will also results in decreased permitting fees.

Constraints



Provide suggestions of how to overcome constraints listed.

Customer Defined Constraints

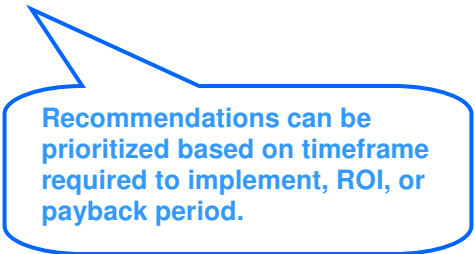
Describe any opportunities that are limited by policies, specifications or requirements defined by the customer.

Regulatory Constraints

Describe any opportunities that are limited by policies and regulations defined by local, state, and federal governments.

Recommendations

Provide the customer with a list of prioritized recommendations. Consider, identify and quantify which opportunities are no cost or low cost, which ones provide the greatest payback, and those with greatest risk. Recommend those projects in priority that should be addressed immediately.



Recommendations can be prioritized based on timeframe required to implement, ROI, or payback period.

Green Suppliers Network Improvement Matrix Worksheet

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ENVIRONMENTAL IMPROVEMENT METRICS		
Metric	Measure and Improvement Opportunity	Units
Energy	Energy Consumed \$ Quantify from Rate Company Pays for power	Specific to energy source e.g. BTUs or KWH, % reduction
Water	Water used or discharged to sewer or for waste water treatment \$ Quantify from Rate Company Pays for water	Gallons, % reduction
Water Pollution	Gallons per Year \$ Saved for reduced processing/disposal costs	Gallons, % reduction
Air	Air Emissions Generated Reduction in permitting fees	Pounds/Year, % reduction
Solid Waste	Solid Waste Disposed Calculate savings from the \$/pound paid to dispose	Gallons or Pounds/Year, % reduction
Hazardous Waste	Hazardous Waste Generated Reduction in processing and disposal costs	Pounds/Year, % reduction
Toxic/Hazardous Chemicals	Toxic/Hazardous Chemicals Used Reduction in chemical costs, OSHA requirements, insurance	Gallons or Pounds/Year, % reduction

Qualitative Measures	EMS, CMS, ISO Certification, etc.	
LEAN IMPROVEMENT METRICS		
Metric	Measure and Improvement Opportunity	Units
Inventory Turns		
On- time Delivery		%
Scrap/Rework		Pounds/Year, %
Other Specifics (Takt Time Reduction, Floor Space, etc...)		

Green Suppliers Network Improvement Opportunity Metric Record

This sheet can be used to provide the supplier with the Lean and Clean metrics associated with each improvement opportunity contained in the recommendations. This will help the supplier measure results in appropriate metrics and units.

Improvement Opportunity 1	Metric	Units
Improvement Opportunity 2	Metric	Units
Improvement Opportunity 3	Metric	Units
Improvement Opportunity 4	Metric	Units
Improvement Opportunity 5	Metric	Units
Improvement Opportunity 6	Metric	Units
Improvement Opportunity 7	Metric	Units
Improvement Opportunity 8	Metric	Units
Improvement Opportunity 9	Metric	Units
Improvement Opportunity 10	Metric	Units

